

Amendments To The Claims:

Please amend the claims as shown.

1 – 38 (canceled)

39. (currently amended) A method of producing without the use of a mould a complete three-dimensional body having an inner cavity, the method comprising:

disposing a first partial quantity of a compacted starting material, the first partial quantity having a shape different from a desired shape of the three-dimensional body;

exposing the first partial quantity to a controlled pattern of energy effective to compact melt only a portion of the first partial quantity;

directionally solidifying the melted portion of the first partial quantity to form epitaxially grow a crystalline structure comprising a shape with outer and inner dimensions in accordance with a first layer of the desired shape of the three-dimensional body; and

repeating the disposing and exposing steps with additional partial quantities of starting material to add additional layers of the desired shape to the first layer until the three-dimensional body of the desired shape having an inner cavity is formed.

40. (previously presented) The method of claim 39, further comprising varying, within a selected one of the partial quantities, a material composition of the starting material to achieve a composition gradient within a selected layer of the three-dimensional body.

41. (previously presented) The method of claim 40, further comprising disposing a nickel-based or cobalt-based superalloy powder to form an inner region of the selected one of the partial quantities, and disposing an MCrAlY alloy powder to form an outer region of the selected one of the partial quantities.

42. (previously presented) The method of claim 40 as applied to form a turbine blade and further comprising varying the material composition of the selected partial quantity between a first side and a second side so that the formed layer has a composition gradient between a convex side and a concave side of the turbine blade.

43. (previously presented) The method of claim 39, further comprising varying, between two different partial quantities, a material composition of the starting material to achieve a composition gradient between selected layers of the three-dimensional body.

44. (previously presented) The method of claim 43, further comprising disposing a starting material comprising reinforcing fibres for a first selected partial quantity and disposing a starting material without reinforcing fibres for a second selected partial quantity so that a first of the respective formed layers comprises the reinforcing fibres and a second of the respective formed layers lacks any reinforcing fibres.